

U.S. Patent Application No. 10/699,425  
Amendment After Final Rejection  
Reply to Final Office Action dated January 7, 2009

## **REMARKS/ARGUMENTS**

This is a reply to the Final Office Action dated January 7, 2009.

### **Status of Claims**

Upon entry of this amendment:

Claim 4 is pending.

Claims 1-3 and 5-14 are canceled.

No claim is currently amended.

No new claim is currently added.

No claim is withdrawn.

### **Nature of Claim Amendments**

Claims 1, 2, 5, 6, and 8 are canceled by the current amendment. Claims 3, 7, and 9-14 were previously canceled.

Accordingly, no new issues are presented by this amendment that would require further consideration or search, and no issues of new matter are raised by this amendment. Therefore, it is submitted that this amendment is appropriate for entry at this time, and notification of such action is respectfully requested.

### **Response to Reference To Radwanski**

The Final Office Action, at page 5, paragraph 5 thereof, makes reference to the Radwanski reference, indicating that the reference “still meets the limitations as currently claimed.”

It nonetheless is unclear to the applicants whether Radwanski is relied upon as a basis of a rejection against present claim 4 in particular.

Radwanski was not applied in the previous Office Action of October 1, 2007. Going further back in time, Radwanski was applied to a different version of claim 4 in the earlier Office Action of April 16, 2007. Present claim 4 recites, *inter alia*, a nonwoven anti-microbial wipe ***consisting essentially of*** a fibrous nonwoven substrate treated with a **non-ionic and cationic binder mixture** and a **cationic dual quaternary ammonia anti-microbial agent**. The italicized claim features were introduced to claim 4 after the Office Action of April 16, 2007. Therefore, if the

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Patent Office is relying on Radwanski to support a rejection of present claim 4, the applicants respectfully request that the reference be positively included in the statement of a rejection to notify the applicants of the exact grounds of the rejection against current claim 4.

To the extent Radwanski is considered relevant to present claim 4 by the Patent Office under some section or sections of the Patent Statute, the applicants point out that Radwanski et al. omits required features of the claim and thus does not anticipate or show the claim to be obvious.

As an omitted claim feature, present claim 4 specifies, *inter alia*, that the wipe consists essentially of a fibrous nonwoven substrate that is coated with the non-ionic and cationic binder mixture before it is *subsequently* coated with the cationic dual quaternary ammonia anti-microbial agent. Thus, from a compositional and structural standpoint, the wipe of the present invention has the non-ionic/cationic binder mixture *coated on the fibrous substrate*, and not on the anti-microbial agent. Radwanski has the opposite arrangement. With respect to the binders in column 3 of Radwanski that the Patent Office referenced as being relevant in an earlier Office Action of April 16, 2007 (page 4), that binder is applied to the anti-microbial particles before the resulting encapsulated anti-microbial agent particles are combined with a fibrous substrate (see col. 3, lines 55-58; col. 8, line 50 to col. 9, line 5; col. 12, lines 31-33, 36-46). Thus, the specific types of binders disclosed by Radwanski , such as at col. 9, lines 1-5, are coated on the anti-microbial particles *per se*, and not on the fabric substrate. Significantly, Radwanski also explains that the specified binders must be coated on the anti-microbial particles to support and be consistent with Radwanski's objective of providing a controlled release wiper that can retain its anti-microbial activity over the course of multiple rinsing cycles (col. 4, lines 48-64; col. 8, line 50 et seq.; col. 12, lines 61-67; col. 13, lines 28-37).

As another omitted claim feature, present claim 4 recites *a non-ionic and cationic binder mixture* is incorporated into the wipe. Radwanski omits this feature. Radwanski generally refers to a "clear binder" contained within the wiper that is used in combination with dye indicators, but the reference provides no specific information on the type of binder or its charge (e.g., anionic, non-ionic, cationic), which might be used for that purpose. Radwanski also did not indicate the charge of the separate binders used to encapsulate the anti-microbial agent particles. Radwanski does not teach or suggest that the charge of the binder is a technically relevant feature in any respect for purposes of the controlled release anti-microbial wiper described by

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Radwanski or any other purpose.

As yet another omitted claim feature, Radwanski fails to teach quaternary amines that are *cationic dual* quaternary ammonia anti-microbial agents such as recited in present claim 4 (see col. 3, lines 34-39; col. 8, lines 1-2). Radwanski only refers to “quaternary amines” in general (e.g., col. 3, line 37; col. 8, lines 1-2), without teaching or suggesting a charge thereof or possible use of dual quaternary amines or that such features are relevant to the result.

As another omitted feature, present claim 4 also recites that “the cationic dual quaternary ammonia anti-microbial agent being readily released upon being introduced to an associated water source.” The wiper of Radwanski has an opposite (controlled release) property, and thus teaches away from this property of the wipe as recited in present claim 4. The wipe of the present invention has a significantly different property and feature as compared to Radwanski’s wiper, of *readily releasing* the anti-microbial agent into a water source to provide a more potent and effective disinfectant solution associated with the wipe. This unexpected and beneficial property of the inventive wipe flows from the recited structure, and underscores the fact that it has a unique and significantly different structure than the controlled release wiper of Radwanski.

As can be appreciated from the above, the applicants should not need to further specify the binder chemistry or quantify molecular weights or degree of hydrolysis thereof, as raised in the Final Office Action, because present claim 4 already specifies a number of concrete features omitted by Radwanski et al., and the combined features provide an unexpected and different result relative to Radwanski et al.

#### **Response to Anticipation Rejection Based On Cavanagh**

Claims 1, 2, 4, 5, 6, and 8 have been rejected under 35 USC § 102(b) as being anticipated by Cavanagh (U.S. Pat. No. 5,421,898) and cited in the search report supplied by the applicant in the Information Disclosure Statement (IDS) submitted February 19, 2008. The Office Action states that in an effort to keep the prosecution consistent that the Examiner is restating the rejection that the European Search Report has applied.

In view of the following reasons, Cavanagh fails to disclose all of the elements of present claim 4, and also fails to disclose a combination of these elements as arranged in the claim.

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The applicants respectfully point out that the Cavanagh reference cited in the EPO's Search Report of July 31, 2007 in the applicants' related European patent application, was not designated by the EPO as being relevant to any claim reciting subject matter corresponding to present claim 4. For the Examiner's information, and as reflected by publicly accessible records via the EPO's "Register Plus" online database, the European application claim 4 is most similar to present claim 4 in reciting the wipe has a fibrous nonwoven substrate that is coated with a non-ionic and cationic binder mixture and subsequently coated with cationic anti-microbial agent. Indeed, the EPO determined that no reference cited in its search report qualified as an "X" or "Y" category reference against European application claim 4. The applicants further respectfully point out that their IDS submitted February 19, 2008 also included citation and a copy of the EPO's examination report dated November 11, 2007 received in the applicants' related European patent application. In the EPO's examination report (page 4), the EPO indicated that the subject matter of above-noted European application claim 4 is "new and inventive". As can be appreciated, the Cavanagh reference has not been used in rejecting the same or similar claim in the foreign application to present claim 4, nor has the reference been identified in some manner in the foreign application as being particularly relevant to present claim 4.

The Final Office Action does not appear to provide specific reasons indicating how present claim 4 is anticipated by Cavanagh. Cavanagh, similar to Radwanski, is directed to an element for controlling release of disinfectant from a substrate. Cavanagh specifies that the substrate meters release of disinfectants, such as quats, over several rinsings in water "thereby avoiding the catastrophic release of disinfectant" (col. 1, line 67 to col. 2, line 7). Cavanagh thus strongly teaches away from the present invention. Cavanagh may teach use of PVA polymer, but does not specify its charge. Further, even if the PVA taught by Cavanagh is non-ionic, for sake of argument only, Cavanagh does not teach or suggest the PVA can be successfully used in combination with a cationic binder as a mixture thereof in a wipe that also contains a cationic dual quaternary ammonia anti-microbial agent that is readily releasable upon being introduced to an associated water source.

In view of at least these reasons, the applicants respectfully submit that present claim 4 is not anticipated by Cavanagh, nor would it have been obvious over Cavanagh at the time of the present invention.

Reconsideration and withdrawal of this rejection is respectfully requested.

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It is believed that this application is in condition for allowance, and notice of such is respectfully requested.

If the Examiner believes that a teleconference would be useful in expediting the prosecution of this application, the official is kindly invited to contact the applicants' representative of record indicated below.

Respectfully submitted,

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